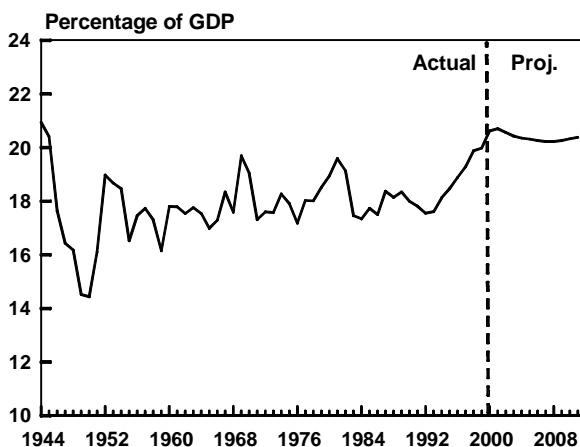


# Cutting Taxes

Federal tax revenues will claim a postwar record 20.7 percent of gross domestic product (GDP) in fiscal year 2001 (see Figure 7). The Congressional Budget Office (CBO) projects that revenues measured as a share of GDP will decline over the next few years to 20.2 percent, a level that is still higher than in any year before 2000 other than the last two years of World War II. In light of that situation, the Congress may want to use some of the projected surpluses to cut taxes. If so, it will face two issues: how much to reduce revenues and how to accomplish that reduction. Choosing among alternative approaches requires understanding the current structure of the federal tax system as well as the criteria that may prove useful in evaluating any tax change.

**Figure 7.**  
**Total Revenues as a Share of GDP**  
**(By fiscal year)**



SOURCE: Congressional Budget Office.

## The Federal Tax System

The federal tax system will raise more than \$2 trillion in fiscal year 2001 (see Table 6). Over 90 percent of that revenue will come from income and social insurance taxes. The individual income tax is the largest source, accounting for just over half of the total. Social insurance taxes, levied primarily to support Social Security and Medicare, make up nearly a third. The remainder splits roughly evenly between the corporate income tax and a variety of smaller revenue sources including excise taxes, the estate and gift tax, customs duties, and miscellaneous levies.

## The Individual Income Tax

Americans are most familiar with the individual income tax and its recurring April 15 deadline. Although the tax has many complexities, its basic structure is straightforward: add up income from various sources; subtract exclusions, standard or itemized deductions, and personal exemptions to determine taxable income; apply graduated tax rates to assess basic tax liability; and subtract various credits to calculate final liability. The tax falls most heavily on people at the top of the income distribution: those in the highest quintile—the fifth of households with the highest income—pay over three-fourths of the total revenue from the individual income tax (see Table 7 on page 378). By contrast, households in the bottom three-fifths of the income distribution pay just 7 percent of the tax, and because of the earned income tax credit (EITC), the lowest quintile as a group actually receives a net payment.

That distribution reflects three developments in the 1990s. First, tax acts in 1990 and 1993 added three new tax brackets to the 15 percent and 28 percent brackets set in the Tax Reform Act of 1986 (TRA-86). The new brackets—with rates of 31 percent, 36 percent, and 39.6 percent—sharply increased the taxes paid by high-income households. Second, the income of households facing the higher rates rose much more rapidly over the decade than did overall income, making a markedly larger share of total income subject to the higher rates. Third, the EITC was greatly expanded in the early 1990s. Those changes combined to boost the share of individual income tax liability in the top quintile from 70 percent in 1991 to 78 percent just six years later. De-

spite the tax reduction from expanding the EITC, the changes were also an important cause of growth in income tax revenues, which will rise from 7.7 percent of GDP in 1992 to a projected 10.4 percent in 2001 (see Figure 8 on page 379).

The rate structure of the individual income tax makes it the most progressive of the major sources of revenue; that is, the tax measured as a share of income—the effective tax rate—rises most sharply as income increases (see Box 4). In 1997, households in the lowest income quintile faced a negative effective tax rate, -4.5 percent, compared with 5.7 percent for the middle quintile and 16.1 percent for the highest quintile.

**Table 6.**  
**CBO's Projections of Revenues (By fiscal year)**

Source	Actual 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>In Billions of Dollars</b>												
Individual Income Taxes	1,004	1,076	1,125	1,176	1,230	1,289	1,354	1,424	1,500	1,583	1,675	1,774
Corporate Income Taxes	207	215	217	226	236	246	255	264	276	289	303	319
Social Insurance Taxes	653	686	725	762	797	840	879	921	963	1,010	1,059	1,110
Excise Taxes	69	71	74	76	78	81	83	86	88	91	94	97
Estate and Gift Taxes	29	30	32	34	35	36	37	39	43	46	48	52
Customs Duties	20	21	23	24	25	26	27	27	28	29	30	31
Miscellaneous	43	36	41	44	51	52	54	55	57	59	61	63
<b>Total</b>	<b>2,025</b>	<b>2,135</b>	<b>2,236</b>	<b>2,343</b>	<b>2,453</b>	<b>2,570</b>	<b>2,689</b>	<b>2,816</b>	<b>2,955</b>	<b>3,107</b>	<b>3,271</b>	<b>3,447</b>
On-budget	1,545	1,630	1,703	1,782	1,864	1,950	2,040	2,136	2,243	2,360	2,489	2,628
Off-budget <sup>a</sup>	481	504	532	561	589	620	649	680	712	746	782	819
<b>As a Percentage of GDP</b>												
Individual Income Taxes	10.2	10.4	10.3	10.2	10.2	10.2	10.2	10.2	10.3	10.3	10.4	10.5
Corporate Income Taxes	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Social Insurance Taxes	6.6	6.6	6.7	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
Excise Taxes	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Estate and Gift Taxes	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Customs Duties	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Miscellaneous	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
<b>Total</b>	<b>20.6</b>	<b>20.7</b>	<b>20.5</b>	<b>20.4</b>	<b>20.3</b>	<b>20.3</b>	<b>20.2</b>	<b>20.2</b>	<b>20.2</b>	<b>20.3</b>	<b>20.3</b>	<b>20.4</b>
On-budget	15.7	15.8	15.7	15.5	15.5	15.4	15.4	15.3	15.3	15.4	15.5	15.5
Off-budget <sup>a</sup>	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.8

SOURCE: Congressional Budget Office.

a. Social Security.

**Box 4.****Tax Brackets, Marginal Tax Rates, and Average Tax Rates**

Calculating a person's tax liability, or tax bill, involves measuring total income, excluding particular kinds of income to obtain adjusted gross income (AGI), subtracting personal and dependent exemptions and various deductions to determine taxable income, applying a set of five tax rates to different ranges of income, and deducting any applicable credits. In addition, calculations must take account of income ranges over which certain tax provisions phase in or out, granting some or none of various deductions, exemptions, or credits. These complexities result in a number of different measures for determining how much a person or a couple owes in taxes. In particular, economists distinguish among statutory marginal—or bracket—rates, effective marginal rates, and effective, or average, rates.

Taxpayers are most familiar with the schedule of five tax rate brackets found in the returns they file each year. For any taxpayer, the portion of taxable income falling within a given bracket faces the tax rate for that bracket, regardless of the level of the taxpayer's total income. For example, in 2001, the first \$45,200 of a married couple's taxable income is subject to a rate of 15 percent (see the figure below). The tax rate rises to 28 percent on the next \$64,050, to 31 percent on the next \$57,200, and to 36 percent on the next \$160,550. All income in excess of \$297,300 is taxed at 39.6 percent. Economists call the rate that applies to the last dollar of a taxpayer's income the *statutory marginal rate*.

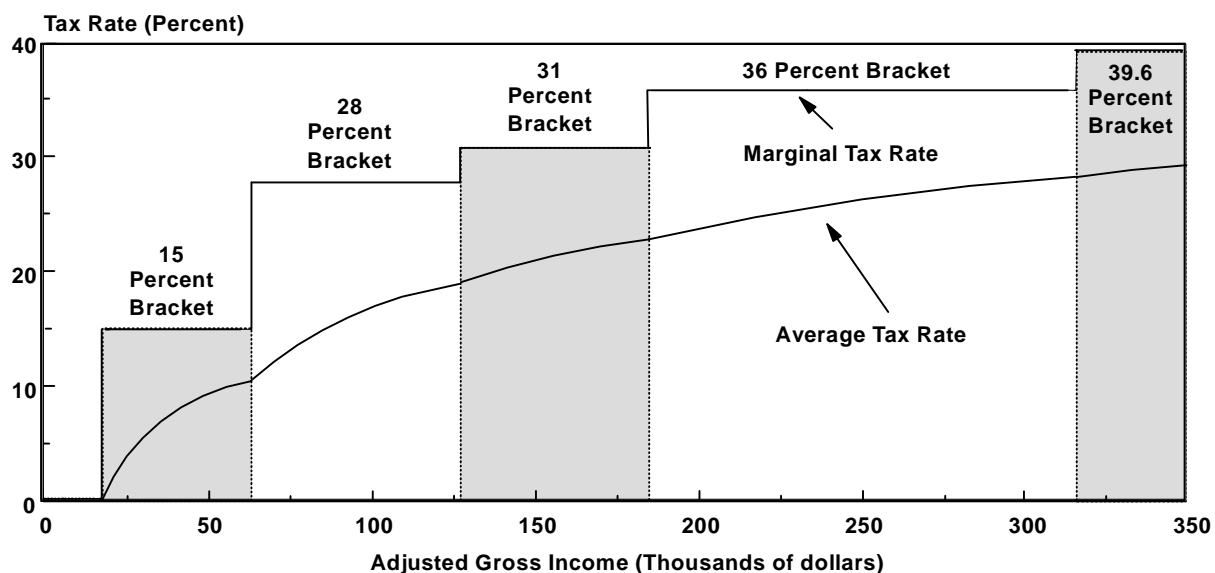
For many taxpayers, the phasing in or out of particular tax provisions causes their *effective marginal tax rate* to dif-

fer from their bracket rate. The earned income tax credit, for example, phases out at a rate of 21.06 cents for each dollar of AGI between \$13,090 and \$32,121 for a taxpayer with two children, raising the taxpayer's effective marginal tax rate by 21.06 percentage points above the statutory marginal rate of either zero or 15 percent, depending on taxable income. Because the effective marginal rate measures the actual tax on an additional dollar of income, it may affect how taxpayers behave and is of greatest interest to economists.

By contrast, the *effective (or average) tax rate* equals the amount of tax an individual pays divided by AGI. For example, if a taxpayer with AGI of \$20,000 pays \$3,000 in federal income tax, his or her average tax rate is 15 percent (\$3,000 divided by \$20,000). Because AGI differs from taxable income by the applicable exemptions and deductions, the average tax rate is only loosely related to statutory rates. Furthermore, because statutory rates rise with income across the five brackets, the average tax rate is never higher than the marginal rate and always lower for taxpayers above the lowest tax bracket (see the figure).

Analysts sometimes use a measure of income broader than AGI to gauge effective tax rates. Because AGI excludes some types of income, such as the untaxed portion of Social Security benefits and interest on tax-exempt bonds, a more inclusive calculation can provide a better measure of tax liabilities relative to income.

**Average and Marginal Tax Rates for Married Couples with Two Children  
Who File Jointly and Claim the Standard Deduction, 2001**



SOURCE: Congressional Budget Office.

NOTE: The marginal and average tax rates shown are for the five statutory tax brackets. They do not include the effects of phasing in or phasing out various provisions of the tax code, special tax rates on capital gains, or the alternative minimum tax, nor do they include tax credits.

## Social Insurance Taxes

Social insurance taxes claim just under 7 percent of GDP each year, primarily in support of Social Security and Medicare. The taxes, which are often referred to as payroll taxes, principally comprise several separate levies. The tax that finances Social Security equals 6.2 percent of wage, salary, and self-employment income up to a taxable maximum (\$80,400 in 2001) paid by both employer and employee. Thus, the total Social Security tax is 12.4 percent of earnings up to the maximum. The Medicare tax has no cap and equals 1.45 percent of earn-

ings, again paid by both employer and employee to yield a total tax of 2.9 percent. Economists generally agree that the entire payroll tax is actually paid by workers because their wages are lower by the employer's share of the tax. Smaller taxes finance unemployment benefits and retirement benefits for railroad and government workers.

From 1960 to 1990, payroll taxes climbed sharply as a share of GDP, rising from 3 percent to nearly 7 percent. That rise came in part from an increase in the tax rate (from 3 percent to the current 7.65 percent) faced by both employers and employees

**Table 7.**  
**Effective Tax Rates and Shares of Tax Liability, by Income Quintile and Source of Revenue, 1997**

Source of Revenue	Pretax Household Income Quintile					All Households
	Lowest	Second	Middle	Fourth	Highest	
Effective Tax Rate (As a percentage of pretax income)						
Individual Income Taxes	-4.5	2.2	5.7	8.2	16.1	11.0
Corporate Income Taxes	0.4	0.9	1.2	1.4	4.4	2.9
Social Insurance Taxes	6.4	8.7	9.7	10.3	6.7	8.1
Excise Taxes	<u>2.6</u>	<u>1.6</u>	<u>1.1</u>	<u>0.9</u>	<u>0.5</u>	<u>0.9</u>
Total	4.9	13.4	17.7	20.8	27.9	22.8
Share of Tax Liability (In percent)						
Individual Income Taxes	-2	2	7	15	78	100
Corporate Income Taxes	1	3	6	9	82	100
Social Insurance Taxes	3	10	17	26	44	100
Excise Taxes	13	17	18	20	32	100
Total	1	5	11	18	65	100
Pretax Household Income						
Average (Dollars)	12,700	28,400	44,800	64,800	164,000	62,400
Share (Percent)	4	9	14	20	53	100

SOURCE: Congressional Budget Office.

NOTES: Pretax household income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and in-kind benefits. It also includes the corporate income tax and the employer's share of Social Security and federal unemployment insurance payroll taxes. For purposes of ranking by adjusted household income, income for each household is divided by the square root of household size. Quintiles contain equal numbers of people. Households with zero or negative income are excluded from the lowest income category but are included in the total.

Individual income taxes are distributed directly to households paying those taxes. Corporate income taxes are distributed to households according to their share of capital income. Social insurance payroll taxes are distributed to households paying those taxes directly or indirectly, through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed goods and services.

and in part from 10-fold growth (from \$4,800 to \$51,300) in the maximum amount of earnings subject to tax. The GDP share of payroll taxes is roughly 7 percent today and will remain at about that level under current law. For most families, the payroll tax now exceeds their income tax. Nearly three-fourths of families who pay either tax face a combined employer/employee payroll tax that is greater than their income tax liability.

The cap on earnings subject to the Social Security tax and the fact that income other than earnings is not taxed combine to impose somewhat higher payroll taxes, measured as a percentage of income, on middle-income households than on those at the top or bottom of the income distribution. In 1997, households in the lowest income quintile incurred payroll taxes equal, on average, to 6.4 percent of their income, compared with 9.7 percent for households in the middle quintile and 6.7 percent for those in the top quintile. At the same time, Social Security benefits replace a larger share of preretirement income for people with low lifetime earnings than for people with higher earnings. Analyses have reached differing conclusions on the overall progressivity of the program when both taxes and benefits are considered.

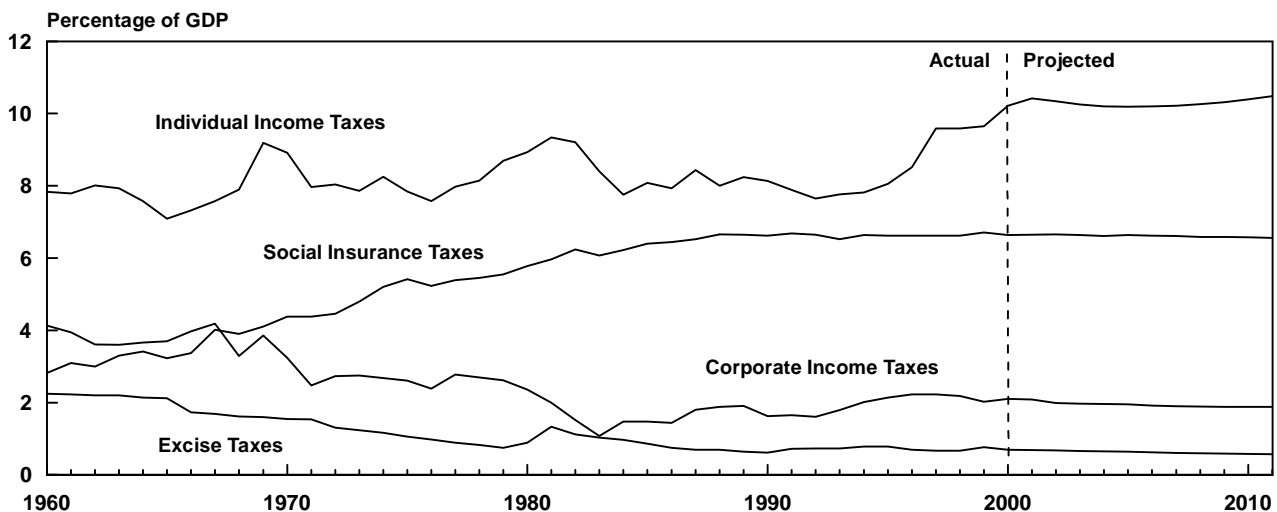
## Other Federal Taxes

One-sixth of federal tax revenues come from various other sources, the largest of which yields only about one-tenth of the total.

**The Corporate Income Tax.** After falling from 3.6 percent of GDP in 1962 to just over 1 percent in the early 1980s, the corporate income tax has rebounded somewhat to claim roughly 2 percent of GDP this year. The recent rise resulted primarily from the Taxpayer Relief Act of 1986 and from generally higher corporate profits in the 1990s. CBO projects that that percentage will decline slightly over the next decade. The tax currently provides just over one-tenth of total federal revenues, but that share is expected to fall over time. Although the tax has four rates, the first two (15 percent and 25 percent) apply only to corporate income below \$75,000; the higher two (34 percent and 35 percent) differ only slightly. At least 80 percent of corporate income is taxed at the highest rate.

Regardless of how they are levied, taxes are paid by individuals, not by corporations. Various theories have been advanced to explain how the bur-

**Figure 8.**  
Revenues, by Source, as a Share of GDP (By fiscal year)



SOURCE: Congressional Budget Office.

den of the corporate income tax might be borne by workers, owners of corporate capital, or owners of capital generally. Most economists now agree that all or nearly all of the tax falls on the owners of capital, both corporate and noncorporate. Since the nation's capital stock is owned primarily by people at the upper end of the income distribution, the tax falls most heavily on the wealthy and is therefore progressive. In 1997, households in the top income quintile effectively paid corporate income taxes equal to about 4.4 percent of their income, compared with 1.2 percent for households in the middle quintile and 0.4 percent for those in the lowest quintile.

**Excise Taxes.** Excise taxes, which are levied on such goods and services as gasoline, alcohol, tobacco, and telephone use, represent a small and declining share of total federal revenues. Most of those taxes are levied on the quantity rather than the value of goods, and rates have generally not kept pace with inflation. In the early 1960s, excise taxes were just over 2 percent of GDP; this year, they will be only about one-third as large, or 0.7 percent.

Because consumption claims a smaller share of income as income rises, effective excise tax rates are higher for households at the lower end of the income distribution than for those at the top. Households in the lowest income quintile faced an average effective rate of 2.6 percent in 1997, compared with 0.5 percent for households in the top quintile.

**The Estate and Gift Tax.** The estate and gift tax combines the taxation of assets given away during a person's life and bequests made at death. The tax applies only to large estates and gifts. Under current law, estates valued at less than \$675,000 are exempt from taxation, but those valued at more than \$675,000 are taxed at rates ranging from 37 percent to 55 percent.<sup>1</sup> Annual gifts in excess of \$10,000 per recipient are subject to similar levies. The \$675,000 exclusion, which applies to the lifetime sum of taxable gifts and bequests, is scheduled to increase incrementally to \$1 million by 2006 and remain at

that level. By contrast, the \$10,000 annual limit on gifts will increase to keep pace with inflation since 1997, but only in \$1,000 increments.

Revenues from the estate and gift tax have grown rapidly over the past decade, nearly tripling from \$11 billion in 1991 to a projected \$30 billion in 2001. Even so, the tax is relatively small. CBO projects that revenues from that tax will claim only 0.3 percent of GDP over the next decade. Furthermore, the tax affects few taxpayers: less than 2 percent of estates (just over 100,000 in 1998) incur any tax liability. Gift tax returns, which may be filed annually and may or may not involve tax liability, are more numerous (about 260,000 in 1998), but they represent less than 0.5 percent of all taxpayers.<sup>2</sup>

Assessing the distributional impact of the estate and gift tax is difficult. Measured with respect to the well-being of decedents and gift-givers, the tax is clearly highly progressive; only the largest estates and gifts pay any tax. Some economists argue, however, that it is more appropriate to assign the burden of the tax to beneficiaries. Unfortunately, research yields incomplete and conflicting findings about the distributional impact of the tax from that perspective.

Finally, recently voiced concerns about the effects of estate taxes on the viability of small businesses and family farms may be disproportionate to the size of the problem. As discussed further below, relatively few such enterprises have any estate tax liability. (In 1995, they accounted for less than 4 percent of total estate tax revenues.)

**Customs Duties and Miscellaneous Receipts.** The final pieces of federal collections are customs duties and miscellaneous receipts. Customs duties grow over time in tandem with imports and claim about 0.2 percent of GDP. Tariff reductions enacted in 1994 are not yet phased in fully and will constrain any growth in revenues from that source.

1. Rates actually range from 18 percent to 60 percent. However, rates below 37 percent apply only to that part of an estate below the \$675,000 exemption and are therefore irrelevant. The 60 percent rate applies to that part of an estate valued between \$10 million and about \$17 million in order to phase out the benefits of the graduated estate tax brackets.

2. The Taxpayer Relief Act of 1997 gave taxpayers an incentive to file gift tax returns, even if gifts were below the \$10,000 limit. Under the act, the Internal Revenue Service (IRS) may not question the information on those returns after three years. If no return is filed, the IRS may audit gifts when an estate tax return is filed upon the taxpayer's death.

The largest component of miscellaneous receipts is the profits of the Federal Reserve System, which are turned over to the Treasury and counted as revenues. The other major source of receipts is the Universal Service Fund, collected from telecommunications users to finance Internet service for libraries and schools and to subsidize basic telephone service for high-cost areas and low-income households. Those two and other, smaller components of receipts equal about 0.4 percent of GDP, a level that is projected to remain fairly constant over the next decade.

## Criteria for Assessing Tax Changes

Any examination of potential tax changes requires a set of criteria by which to evaluate the effects on individuals and the economy as a whole. Economists focus their evaluation of taxes on three characteristics:

- o Efficiency—the impact of the tax on economic activity and growth,
- o The fairness of the tax with respect to who bears its burden, and
- o The costs of complying with and collecting the tax.

Those three criteria are often in conflict, however, and the Congress faces inevitable trade-offs in its decisions on tax policy.

### Efficiency

Taxes change behavior. Consumers buy less of taxed goods and more of untaxed goods. People decide whether and how much to work on the basis of their after-tax wages and thus may choose to work less when income taxes are higher. Firms pick production methods on the basis of input costs after taxes—using less machinery, for example, in the face of higher taxes on capital. And individuals make decisions about saving on the basis of after-tax returns. All of those responses distort the economy from the way it

would be in the absence of taxes and could lead to slower economic growth and thus a lower level of national well-being. Typical estimates of the economic cost of a dollar of tax revenue range from 20 cents to 60 cents over and above the revenue raised.<sup>3</sup>

Those negative effects do not mean, however, that taxes have only negative effects. Some taxes may induce behavior consistent with other policy goals; cigarette taxes lead to a reduction in smoking and its associated costs, and emission taxes cause firms to shift to production methods that pollute less. Furthermore, the government needs revenues to carry out its various functions. Nevertheless, economists agree that taxes should distort behavior as little as possible, consistent with other objectives. In general, that means not levying taxes that affect some activities more than others. Economists generally refer to minimizing distortions as maximizing efficiency.

### Fairness

Unfortunately, maximizing efficiency can mean imposing taxes that many people feel are unfair. The most efficient tax from an economist's viewpoint is a head tax—a specific levy on every individual, regardless of his or her well-being. Because liability under such a tax does not depend at all on behavior, the only distortion comes from the revenue collection itself. However, few people would argue that the U.S. government should pay its bills by charging every citizen \$7,000 (the total of gross government expenditures divided by the total number of citizens). Most would view such a head tax as inherently unfair. Rather than focusing only on maximizing efficiency, the country faces trade-offs between doing what is best for the economy and what is fair.

Economists have developed various ways of assessing fairness. *Horizontal equity* occurs when people in equivalent economic positions have the

3. See Charles L. Ballard and Don Fullerton, "Distortionary Taxes and the Provision of Public Goods," *Journal of Economic Perspectives*, vol. 6, no. 3 (Summer 1992), pp. 117-131.

Furthermore, the efficiency costs rise disproportionately with higher tax rates, so reducing rates could generate substantial gains. (Efficiency losses rise roughly with the square of the tax rate.) See Harvey Rosen, *Public Finance*, 5th ed. (Homewood, Ill.: Richard D. Irwin, 1999).

same tax liability; that is, equals are treated equally. The major difficulty in interpreting that metric comes in defining “equals.” Much of the complexity of the individual income tax derives from the various adjustments to income, such as personal exemptions and itemized deductions, that are intended to yield a measure of taxable income defining “equals.” Any such measure, however, is open to interpretation and debate.

*Vertical equity* occurs when tax liabilities rise with ability to pay, often interpreted as having more income. Progressivity measures that characteristic. A tax is *progressive* when it claims a greater percentage of income as income increases—higher-income families pay a larger share of their income in taxes than do those with lower income. The reverse situation is labeled *regressive*; the tax is a larger share of income for those at the bottom of the income distribution than for those at the top. A tax that claims the same percentage of income from all taxpayers is termed *proportional*.

Vertical equity can be assessed in terms of either effective tax rates (tax liability as a percentage of pretax income) or the effect of the tax on the distribution of after-tax income. The two approaches are quite different but yield comparable assessments of a given tax. A progressive tax, for example, has effective tax rates that rise with income; it also generates a more equal after-tax distribution of income. But that consistency fails to hold when evaluating a change in taxes. For example, a tax reduction that cuts all rates of a progressive tax by the same percentage has no effect on relative effective rates; relative shares of the total tax bill are unchanged. However, the change raises after-tax income much more for families at the top of the income distribution than for those at the bottom, thus increasing inequality. The choice of metric matters.

Considering the distribution of taxes in isolation from the benefits they fund may provide an inaccurate measure of fairness. A system of regressive taxes used to pay for benefits going principally to people at the bottom of the income distribution could be highly progressive in total. Economists do not agree on the distribution of the benefits of government spending, however, and thus have not reached

consensus on the progressivity of all activities of the federal government.

## Complexity and Costs

The costs of collecting taxes are net losses to the economy. Taxes that cost less to collect raise more net revenue relative to resources taken from the economy than do more expensive alternatives. The collection costs include both the costs the government incurs in administering and enforcing the tax code and the costs the public incurs in complying with it. Administrative costs are frequently associated with the ease of evasion. Compliance costs are usually associated with complexity.

Complexity in the tax system largely results from features of the tax code that are designed to affect behavior by taxing some endeavors more or less than others. Those features include activities that are exempt from tax, from various deductions for preferred items, and from credits for undertaking certain actions. As a consequence, many of the same aspects of the system that reduce economic efficiency also increase complexity.

In a number of instances, complexity also arises from efforts to achieve vertical equity. For example, the phaseouts of various tax credits and deductions throughout the code are designed to give benefits only to people with the greatest need, but they make taxes more difficult to calculate. Similarly, the earned income tax credit provides wage subsidies to low-income families but requires them to fill out an additional form. And the alternative minimum tax is intended to limit the use of incentives by higher-income taxpayers but requires taxpayers to recalculate their tax liability in an entirely different way and then pay the larger of the regular and alternative taxes.

In some cases, complexity results from trying to make the code efficient. That occurs most frequently in the case of business taxation, in which considerable complexity stems from the need to define income consistently so that it may be taxed with a minimum of distortion.



Minimizing complexity, therefore, in some instances involves a trade-off with vertical equity and efficiency. In other instances, probably most, it is consistent with horizontal equity and greater efficiency. All else being equal, taxes that are simpler and easy to enforce are preferred in order to minimize the costs of collection.

## Ways to Reduce Revenues

Given the current near-record levels of federal revenues as a share of GDP, the Congress may want to use some of the projected surpluses to cut taxes. In doing so, it faces two issues: the size of the reduction and its nature. The Congress can choose from a range of approaches, including:

- o Broad-based tax cuts that affect most taxpayers;
- o Tax cuts aimed at reducing particular disincentives in the current tax system;
- o Tax cuts designed to simplify the tax system or improve compliance; and
- o Tax cuts that provide new incentives for particular types of behavior.

Options based on each approach may have different effects on the complexity of the tax code, incentives or disincentives for particular behavior, and the distribution of after-tax income among families and individuals.

Estimates of the amount of revenue that would be lost under each of the options discussed in this chapter should be viewed as approximate. Unlike the revenue estimates provided by the Joint Committee on Taxation for the options in Chapter 7, the estimates for options in this chapter come from CBO.

## Making Broad-Based Tax Cuts

Two federal taxes—the individual income tax and the payroll taxes funding Social Security and Medicare—affect most families. Consequently, cutting either or

both of those taxes is the easiest way to provide substantial across-the-board tax relief.

**The Individual Income Tax.** Rapidly rising incomes over the past decade have caused individual income tax revenues to climb more sharply than GDP, reaching 10.2 percent of GDP in 2000, the highest level ever. Although much of the increase in revenues has come from the concentration of income gains in the top income brackets that face the highest tax rates, many observers argue that the increase calls for some form of across-the-board cut in individual income taxes. Such a cut would lower top tax rates toward the levels of the early 1990s and could have positive effects on both incentives to work and the national saving rate.

Most evidence suggests that income taxes modestly reduce incentives to work because they reduce after-tax wages. The negative effects are particularly strong for workers who are not their family's principal earner. Lowering income tax rates would decrease those disincentives and result in an expansion of the national labor supply. Evidence with respect to the effect of income taxes on saving is weaker, but many analysts have concluded that those taxes also reduce the incentive to save. Hence, cutting tax rates would also reduce some existing disincentives to save and could lead to an increase in the national saving rate.

More important, because it taxes some income-producing activities and not others, the income tax code distorts choices about production, consumption, and portfolio allocation. Those distortions result in economic inefficiency—too much activity in areas subject to lower or no taxes and too little activity in areas subject to higher taxes. Lowering tax rates reduces those differentials and consequently improves efficiency. Since some of those distortions were deliberately enacted to encourage particular activities such as home ownership and charitable giving, however, lowering tax rates can lead to less of what has been legislatively deemed to be desirable behavior.

Across-the-board rate cuts may be implemented in various ways that have differing consequences for the distribution of income. The two most commonly suggested methods are cutting all rates by a given percentage or by a given number of percentage

points. Either form of rate cut could accomplish any level of desired revenue reduction, determined by how much rates are lowered. CBO expects nearly \$1.1 trillion in individual income tax revenue in 2001, so a 10 percent tax cut would reduce tax liabilities in that year by about \$110 billion. Cutting all individual rates by 2.2 percentage points would yield about the same revenue loss. Regardless of how rates were reduced, however, taxpayers would not realize the full benefits unless the alternative minimum tax (AMT) was also adjusted to preclude the lower tax rates from making more returns subject to the AMT.

A proportional cut—say, 10 percent in all tax rates, including capital gains and the AMT—would not affect progressivity as measured by income tax rates. However, because the individual income tax is the most progressive part of the federal tax system, reducing income taxes while leaving other taxes unchanged makes overall federal taxes less progressive. Furthermore, because the effective tax rate facing high-income taxpayers would be reduced more by a proportional reduction, such a cut would make the distribution of after-tax income more unequal and would thus reduce progressivity under that measure.

A rate cut that reduced all tax brackets by the same number of percentage points would actually increase the progressivity of tax rates by making proportionately larger cuts in the lower rates. However, since low- and middle-income families pay proportionately more in other taxes, an income tax cut would reduce their total taxes by a smaller percentage than it would the taxes of higher-income families.

**Payroll Taxes.** Most families pay more in payroll taxes—deductions from paychecks to fund Social Security and Medicare—than in income taxes. Cutting taxes that finance Social Security (the Old-Age, Survivors, and Disability Insurance program, or OASDI) and Medicare's Hospital Insurance program could thus have a greater impact on most families than would cutting income taxes by the same total amount. Cuts in payroll taxes would have the same kind of effects on work incentives as cuts in the individual income tax. However, the incentives of workers with earnings above the taxable maximum would not be affected by a reduction in OASDI tax rates. Furthermore, because payroll taxes do not apply to investment income, cutting them would have less of an effect on incentives to save than cutting income

taxes would. Finally, because payroll taxes are a larger share of total taxes for low- and middle-income families than for those with higher income, cutting payroll tax rates would increase the overall progressivity of the tax system.

An immediate 10 percent reduction in the tax rates for Social Security and Medicare would reduce revenues by about \$70 billion in fiscal year 2002. The reduction could be scaled to produce a greater or smaller level of tax reduction. For a fixed amount of revenue reduction, cutting the Social Security tax rate would focus more tax relief on low- and middle-income families than would changing the Medicare tax rate because of the limit on earnings subject to the Social Security levy.

Some observers have expressed concern that cutting payroll taxes would adversely affect the Social Security and Medicare trust funds. The impending retirement of the baby-boom generation will deplete those funds rapidly, even at current tax rates; reducing the rates would only exacerbate the situation. Focusing on trust fund balances, however, can be misleading. The funds by themselves will not provide the resources for future benefits. The nation's ability to meet long-term obligations ultimately depends on the level of benefits and the size of the economy (see Box 2 in Chapter 1).

## Reducing Particular Disincentives of the Tax System

Rather than provide broad-based tax relief, the Congress might choose to focus tax cuts on particular groups of taxpayers. Marriage penalties and estate taxes are two aspects of the current tax system that observers have frequently identified as in need of change. The double taxation of corporate income has also drawn the criticism of many tax experts.

**Marriage Penalty.** Many married couples who file a joint return have higher tax liabilities than they would if they were allowed to file as individuals or heads of household (single taxpayers with dependents). At the same time, many other married couples pay lower taxes than they would if they filed as individuals. Whether a couple incurs a marriage "penalty" or receives a marriage "bonus" depends on the

spouses' relative incomes: penalties generally occur when spouses have similar incomes, and bonuses occur when only one spouse works or when spouses have substantially different earnings. Couples with children incur larger penalties than do childless couples (because if they were not married, couples with children would file as heads of household and pay even lower taxes).

Just over 40 percent of married couples incurred marriage penalties in 1999, averaging \$1,480, and about 50 percent received bonuses, averaging \$1,600. Overall, bonuses totaled \$43 billion, about \$10 billion more than total penalties. High-income couples were more likely to incur penalties and less likely to receive bonuses than those with lower income. About 70 percent of both penalties and bonuses affected couples with income above \$50,000.

Any tax system that treats married couples as single taxpaying units subject to progressive tax rates will have marriage penalties, bonuses, or both. One way to reduce the penalties would be to allow couples to choose to file either jointly or individually. That option would erase all penalties other than those associated with the head-of-household filing status and would not affect couples with bonuses. However, couples with the same amounts of income would no longer face the same tax liabilities.

Beyond allowing married taxpayers to choose their filing status, penalties can be reduced by lowering the taxes of penalized couples, increasing the taxes of other taxpayers, or both. Some options would increase tax revenues. For example, requiring all married couples to file individual tax returns would eliminate all marriage penalties but only at the cost of increasing the tax liabilities of couples now receiving bonuses. Alternatively, tax brackets and standard deductions could be made less generous for individuals and heads of household, thus raising their taxes. That change would reduce penalties for some married couples and increase bonuses for others.

Other options would reduce both tax revenues and marriage penalties. The options differ in how much of the tax relief would go to couples incurring penalties and where in the income distribution the tax relief would occur. For example, setting the standard deduction for married couples equal to twice that for single filers would reduce penalties by about 6 per-

cent at an annual cost of roughly \$6 billion. That approach would favor low- and middle-income couples: penalized couples with annual income below \$50,000, who incur just over one-third of total penalties, would get two-thirds of the tax savings. But half of the tax reduction would go to couples not now incurring penalties. Alternatively, setting both the standard deduction and tax bracket widths for joint filers to twice those for individual filers would offset roughly 40 percent of total penalties at an annual cost of about \$40 billion. But it would focus that reduction on higher-income couples: more than 90 percent of the cut in penalties would go to those with income above \$50,000.

Another option would restore the two-earner deduction that existed between 1982 and 1986. That provision allowed two-earner couples to deduct from taxable income 10 percent of the earnings of the lower-earning spouse, up to a maximum of \$3,000. That approach would reduce current marriage penalties by more than one-fourth at an annual cost of about \$12 billion. Roughly 80 percent of the revenue loss would go to reducing current penalties. Most of the benefits would go to higher-income families: couples with income over \$50,000—those most likely to have two earners—would get more than four-fifths of the tax reduction. Like other ways of reducing marriage penalties, that option would also widen the disparity of treatment between married and unmarried couples.

A related issue involves marriage penalties associated with the earned income tax credit. Since many low-income families pay no income tax, most of their marriage penalty results from the loss of the EITC because the percentages and income levels determining the credit do not differ by marital status. As a result, two single parents could lose as much as \$6,765 of the EITC if they married. Setting the credit parameters for couples to twice those for individuals would eliminate that penalty, but it would also give the EITC to couples who would not qualify at all if they had to file as individuals. The penalty could be reduced somewhat at significantly lower cost by phasing the credit out more slowly for couples than for individuals, but that approach would leave many couples facing substantial penalties. Regardless of the approach taken, any option to reduce marriage penalties that does not address the EITC would leave in place much of the penalty for low-income families.

**The Estate and Gift Tax.** The only federal tax on wealth is the estate and gift tax, which imposes levies on large estates and gifts. Proponents of the tax assert that it provides limited redistribution of wealth and gives people an incentive to donate to charities. It also serves as a backstop to other levies, taxing income that would otherwise go untaxed. Critics complain that the tax leads to the breakup of family farms and businesses, discourages saving, and induces costly efforts to avoid paying the tax.

The tax may create problems for family-owned farms and businesses, primarily because estates dominated by family enterprises may lack the liquid assets needed to pay the tax. However, many small businesses are able to undertake tax planning, such as purchasing life insurance to cover any estate tax liability, to mitigate the effects of the tax. Even so, the levy could force the sale of part or all of the enterprise and thus might jeopardize its viability. The tax code allows estates to reduce that effect by spreading payments over time. Despite anecdotal evidence about the adverse effects of the estate tax on family businesses, however, no research has revealed whether the tax actually contributes to the breakup of such enterprises. In 1995, about 2,000 small businesses and farms, roughly defined, incurred any estate tax liability; those enterprises paid less than 4 percent of all estate tax revenues.

Some critics have argued that because the estate tax reduces the size of bequests that can be passed on to heirs, it reduces the incentive to save. The likelihood of such an effect depends on the reasons people have for leaving bequests. On the one hand, if people base decisions on the trade-off between their own consumption and their heirs' consumption, the tax shifts the balance toward their own consumption and they will tend to save less. On the other hand, if people want to leave particular levels of inheritance, the tax forces them to save more to reach their goal. Empirical studies have reached no consensus on the net effect.

Although the estate and gift tax accounts for less than 2 percent of federal revenues, its effect on the distribution of federal taxes among income groups is substantial. Measured in terms of the giver, the estate tax falls primarily on high-income families because it effectively exempts all but the largest estates. As a consequence, eliminating the tax would

substantially reduce the progressivity of the federal tax system. The distributional consequences of the tax are less clear if the burden of the tax is assumed to fall on beneficiaries.

The estate and gift tax may influence more than personal saving. Because the tax does not apply to charitable contributions, it may encourage donations to charitable activities. Significantly lowering the tax could reduce such gifts. The estate tax also interacts with the taxation of capital gains. Under current law, gains incur tax liability only when realized; accrued gains held until death escape the income tax because heirs receive assets with their basis set to the current value (that is, "stepped up" from the decedent's basis to the value at his or her death). Because of that step-up in basis, accrued gains would avoid taxation entirely if the estate tax was removed. Many proposals for modifying the estate tax would therefore either tax any accrued gains at death or require that beneficiaries assume the decedent's basis.

A major criticism of the estate tax is that it leads the owners of significant assets to pursue complicated strategies in their attempt to mitigate or avoid the tax liability. Such activity not only involves potentially great expense but may also result in inefficient use of assets and inequitable treatment of taxpayers, only some of whom undertake actions to lower their taxes. Furthermore, the tax's complexity imposes large compliance costs; conservative estimates place those costs at between 5 percent and 10 percent of revenue collected. Eliminating the tax, or even substantially increasing its exemption level, would mitigate both effects.

Although estate and gift tax receipts are projected to total about \$30 billion in 2001, eliminating the tax could have a larger or smaller effect on federal revenues, depending on changes made to other parts of the tax code. For example, if the step-up in basis for capital assets was also removed, the lost revenue from the estate tax could be offset in part by increased income taxes on capital gains if taxpayers deferred fewer of their gains until death. Similarly, because the estate tax can significantly lower the after-tax cost of spending during one's lifetime, removing the tax could lead to lower levels of deductible expenditures like charitable contributions and consequent increases in income tax revenues.

Other options would reduce the impact of the tax. Under current law, the exempt value of an estate will rise incrementally to \$1 million in 2006 and remain at that level in future years. Indexing that exemption would keep inflation from raising the percentage of families subject to the tax, and increasing the exempt amount further could lower that percentage. Alternatively, lowering estate tax rates would reduce incentives for taxpayers to avoid the tax through complicated actions. Any of those changes would affect only the 2 percent of decedents who owe estate taxes, and a rate change would give more of the benefit of the cut to the wealthiest families within that group.

**Double Taxation of Corporate Income.** Many economists are concerned that the corporate tax creates distortions that cause economic inefficiency. Firms pay taxes on their profits, and investors pay additional taxes when they receive dividends or realize capital gains. The tax thus raises the cost of capital, discourages investment, and may reduce saving. More significantly, it creates various distortions: between noncorporate and corporate businesses; between payment of dividends and internal reinvestment of earnings; and between financing with debt (the interest on which is deductible) and with stock issuance (the dividends from which are not deductible). All such distortions change how corporations operate—in terms of production methods and investment decisions, for example—and thus create economic inefficiency.

The corporate tax will raise nearly \$220 billion in 2001, but eliminating it would reduce revenues by less than that amount because both dividends and capital gains realizations would be greater in its absence. Furthermore, removing distortions caused by differential taxation of business activities would improve economic efficiency, leading to a larger economy and consequent higher revenues. Eliminating the corporate tax, however, might not be optimal in terms of efficient tax collection. The tax applies to the retained earnings of firms; those earnings would either escape taxation under the individual income tax or face lower taxes because any tax on them is deferred until corporate shareholders receive them as future dividends or realized capital gains.

Two approaches that would lose less revenue than would eliminating the tax involve integrating the

corporate and individual income taxes to reduce or eliminate the efficiency costs that come from double taxation. The more complicated approach would replace the current tax with a comprehensive tax on business income and eliminate taxes on capital income at the individual level. The second, more straightforward approach would eliminate either the individual or corporate taxation of business income within the current structure. That approach could be implemented in stages by reducing the share of income subject to both taxes incrementally over a number of years.

A final issue involves the distributional effects of reducing corporate taxes. Most economists agree that the burden of the current corporate tax falls almost entirely on the owners of all capital, both corporate and noncorporate. Because capital ownership is concentrated toward the upper end of the income distribution, the corporate tax is progressive. Any reduction in the tax would give the bulk of gains to higher-income taxpayers and would almost certainly reduce the progressivity of the federal tax system.

## Simplifying the Tax System

Particular features of the tax system might also be targeted because they complicate tax filing. Two features increasingly encountered by taxpayers are the alternative minimum tax and the phaseout of personal exemptions and deductions.

**Alternative Minimum Tax.** The Congress implemented the alternative minimum tax in 1969 to prevent taxpayers from using tax preferences so intensively that they pay little or no tax. The AMT requires that taxpayers add some preference items to income and then recompute their taxes under rules that disallow most exemptions and deductions, and many credits. That recomputation allows a single exemption—\$45,000 for joint filers and \$33,750 for single filers—that is phased out completely for high-income taxpayers. The remaining income is then subject to two tax rates: 26 percent on the first \$175,000 and 28 percent on any excess. Those taxpayers then pay the higher of the normal tax or the AMT.

The adjustments to the AMT include not just preferences used by high-income taxpayers to avoid

taxes but also commonly used deductions, credits, and personal exemptions. As a consequence, many middle-income families would fall under the AMT but for the Congress's repeated exemption of personal credits from the AMT. That exemption is not permanent, however; in 1999, the Congress exempted all personal tax credits from the AMT only through 2001. More important, unlike many other dollar values used to calculate tax liabilities (such as tax brackets, personal exemptions, and the standard deduction), the values for the AMT exemption and tax brackets are not indexed for inflation. As a result, more taxpayers become subject to the AMT each year. In any case, even if the AMT does not result in greater tax liability, a rising number of taxpayers still have to compute it to determine their liability.

CBO estimates that the number of taxpayers subject to the AMT will grow from 2 million in 2001 to 20 million in 2011 if the tax code is not changed. That growth will raise the revenue attributed to the AMT from \$7 billion to \$50 billion over the decade. Much of the increased impact of the AMT derives from the fact that personal exemptions, the standard deduction, and tax brackets in the regular tax are indexed for inflation but the AMT exemptions and tax brackets are not. Increasing those two parts of the AMT over time to keep pace with inflation would eliminate most of the growth in the AMT's reach. If such indexation began in 2002, the number of taxpayers subject to the AMT in 2011 would fall to about 1 million, and the revenue attributable to the AMT in that year would drop by about three-fourths, to about \$12 billion. Eliminating the AMT would further cut revenues by that amount.

**Phaseout of Exemptions and Limitation on Deductions.** Because of the progressive rate structure of the individual income tax, reductions in taxable income, such as personal exemptions and itemized deductions, are more valuable to taxpayers in high tax brackets than to those in low brackets. The tax code reduces that disparity by phasing out personal exemptions and limiting itemized deductions for taxpayers with income above specified levels. In 2001, personal exemptions phase out for joint filers with adjusted gross income (AGI) above \$199,450 and for individual filers with AGI above \$132,950; itemized deductions are reduced by 3 percent of AGI above \$132,950. The two limitations differ, however, in that personal exemptions are phased out completely

for taxpayers with the highest income but most taxpayers keep a substantial portion of their deductions.

The tax code thus effectively imposes higher tax rates on income in the range over which the exemptions and deductions are reduced. For example, for a married couple with two children and income in 2001 above \$199,450, the two phaseouts raise the tax rate on the last dollar of income from the statutory 36 percent to 40.42 percent, or nearly one-eighth higher.<sup>4</sup> The phaseouts also add complexity to the tax code. Eliminating them would simplify the computation of taxes for affected taxpayers at an annual revenue cost of about \$16 billion. In addition, it would slightly improve work incentives for taxpayers who face the higher effective tax rates on any additional income. The gains, however, would accrue entirely to taxpayers with income in or above the phaseout range—about 6 million taxpayers with the highest income. Taxpayers with income above the exemption's phaseout range would receive tax cuts with smaller changes in their marginal incentives.

## Expanding or Adding to Current Incentives

The Congress might choose to focus tax reductions on people engaging in particular activities it wishes to encourage. Any of the current incentives built into the tax code could be expanded, and the cost would depend on how much the current credits or deductions were raised. For example, the current child credit could be increased, or the deduction for charitable contributions could be extended to families that do not itemize their deductions. Tax subsidies for the purchase of health insurance would encourage people

---

4. The example assumes that the couple claims itemized deductions and that the phaseout of those deductions equals 3 percent of income over \$132,950. In the 36 percent tax bracket, the phaseout increases the couple's marginal tax rate by 36 percent of 3 percent, or 1.08 percentage points. The phaseout of personal exemptions reduces allowed exemptions by 2 percent for each \$2,500 of income above \$199,450. Without the phaseout, the couple would have four exemptions of \$2,900 each, for a total of \$11,600. The phaseout reduces that amount by 2 percent of \$11,600, or \$232, for each \$2,500 of income above the threshold—a 9.28 percent rate (\$232/\$2,500). In the 36 percent tax bracket, that reduction increases the couple's marginal tax rate by 3.34 percentage points (9.28 percent times 36 percent). The combined rise in the couple's tax rate is thus 1.08 percent plus 3.34 percent, or 4.42 percent.

to obtain coverage, although much of the benefit from such subsidies could go to those who were already covered. (See Chapter 2 for a more complete discussion of tax incentives for health insurance.) A long list of new incentives could be added. For example, the Clinton Administration proposed expanding the EITC to assist low-income working families and the Congress recently considered raising the limit on contributions to 401(k) retirement plans.

**Earned Income Tax Credit.** In 2001, the earned income tax credit will provide low-income working families with up to \$4,008 in income tax reduction or, for taxpayers with low or no tax liability, payments in the form of tax refunds. Of the \$30 billion cost of the credit in 1999, about 85 percent represented payments to taxpayers in excess of their tax liability. That portion of the credit shows up on the spending side of the federal budget rather than the revenue side.

The EITC has a complicated structure. The credit equals a fixed percentage of earnings up to a maximum that depends on the number of children in the family. The credit stays at that maximum as income rises further, up to a level beyond which the credit is reduced by as much as 21 cents for each additional dollar of income. That reduction continues until the credit falls to zero at a point termed the break-even income. The rates for phasing in and phasing out the credit and the levels of income to which they apply depend on whether the tax unit has no children, one child, or two or more children, with maximum credits rising across the three groups. The credit is refundable; that is, if the credit exceeds a family's tax liability, the family receives the balance as a payment.

Roughly 12 percent of mandatory federal spending on low-income families is provided through the EITC. Its structure, however, creates both incentives and disincentives to work. Furthermore, because the credit is the same for families with two children as for those with more children, it provides less assistance relative to need for larger families. Increasing the credit would concentrate the benefits of the tax cuts among lower-income families. Depending on how the credit was structured, it could improve the incentives to work.

The EITC provides a work incentive for families with earnings in the range over which the credit is rising. Taxpayers with earnings in that range and two children, for example, can claim a tax credit equal to 40 percent of their wages. Such families receive an effective wage that is 40 percent greater than that paid by their employers, thus encouraging them to work more than they would if the wage was unsubsidized. That subsidy is reversed, however, for families with income in the phaseout range. Those families face an effective wage that is less than that paid by their employers; the difference between effective and actual wages is the percentage rate of phaseout, roughly 21 percent for families with two children. Because their net wage (reflecting the loss of the EITC) is lower than their gross wage, families in the phaseout range face a work disincentive and may choose to work fewer hours (although the credit still provides an incentive for such families to continue to hold jobs).

Phasing out the credit more slowly would reduce the work disincentive for families with income in the phaseout range but would give the credit to families earning more than the current break-even income and would reduce their incentive to work. For example, halving the phaseout rate for taxpayers with two children from 21.06 percent to 10.53 percent would raise the break-even income from the current \$32,121 to \$51,153—roughly the 60th percentile of all families with children. That change would extend the credit to about 4 million families who are not now eligible at an annual cost of roughly \$9 billion. The change would have no effect on families with earnings below the phaseout range.

Modifications to the credit could take many forms. The phase-in percentage could be increased to give larger subsidies to working families with the lowest income. That change would also raise the break-even income unless the rate for phasing out the credit was increased as well. The phase-in range could be extended to increase the income range over which wages are subsidized, thus encouraging more families to work. That modification would also lift the break-even income and make more families subject to the work disincentives of the phaseout. Or the amount of the credit could be raised for families with more than two children. That approach would affect relatively few families and would focus added credits on families with arguably the greatest need. For any

of the options, the bulk of the budgetary effect would be to increase outlays for the refundable portion of the credit rather than to reduce revenue collections.

Any expansion of the EITC could increase the complexity of the tax code. Claiming the EITC requires completing an additional form, and any change that raised the break-even income would impose that requirement on more taxpayers. Another issue involves compliance: taxpayers not in traditional families (married couples with children) appear to be unclear about the living arrangements of children that qualify them for the credit. As a result, many taxpayers erroneously claim the credit, either inadvertently or intentionally. In many cases, the Internal Revenue Service lacks the information needed to identify such returns and may consequently allow the credit for ineligible taxpayers. Expanding the EITC would worsen those problems.

**Expanded 401(k) Retirement Accounts.** The tax code encourages saving in many ways, most commonly by deferring the taxation of income from savings or exempting such income from taxation entirely. Capital gains are taxed only when realized, 401(k) plans and traditional individual retirement accounts (IRAs) are taxed when funds are withdrawn, and the earnings of Roth IRAs are never taxed. (Contributions to Roth IRAs come from after-tax income, which is not the case for traditional IRAs.) But taxpayers with AGI above specified levels may not contribute to either kind of IRA and thus cannot benefit from those incentives to save. In addition, caps on contributions to IRAs and 401(k) plans limit the amount workers can save for retirement in tax-preferred accounts.

The deferral of taxes on 401(k) plans influences a worker's retirement saving in two offsetting ways. The net effect on the individual's total saving depends on which effect dominates. On the one hand, deferring taxes makes future consumption relatively cheaper than current consumption and thus leads people to save more for retirement—what economists call the substitution effect. On the other hand, the higher after-tax return on savings allows people to save less but have the same funds available in retirement as they would have had in the absence of the tax deferral—which induces a drop in savings. Economists refer to that result as the income effect. Which effect is stronger depends on many factors and varies among workers. If employers match some or all of

the contributions of their workers, both the substitution and income effects are greater, but the former is likely to dominate.

Workers' annual contributions to 401(k) plans are capped at \$10,500. In 1997, about one-quarter of U.S. workers contributed to 401(k) plans.<sup>5</sup> Among participating workers, just over 5 percent were at the maximum. Such workers get no tax advantage from additional saving and thus have no substitution effect to induce it. The tax savings on their contribution do, however, provide an income effect that leads them to save less (probably by putting less into nonretirement savings accounts or investments).

Increasing the cap on employee contributions to 401(k) plans, as recently proposed, would expand benefits primarily for high-income taxpayers—the group most likely to contribute the maximum allowed. In 1997, the median AGI of workers at the cap was well over \$100,000. Raising the cap would restore the substitution effect for those now constrained by the cap and induce them to save more, at least up to the point where the new, higher cap limited further saving. The higher cap, however, would also strengthen the income effect, making the net impact on saving indeterminate. Moreover, if a taxpayer's total savings exceeded the new maximum, raising the cap would still offer no incentive to save more—that is, no substitution effect would exist.

Extensive analysis of the use of IRAs and 401(k)-type plans has reached no consensus on how those plans affect saving. For example, Poterba, Venti, and Wise conclude that contributions to such plans largely represent new saving.<sup>6</sup> In contrast, Engen, Gale, and Scholz find that little, if any, of the overall contributions to existing IRA and 401(k)-type plans have raised aggregate saving.<sup>7</sup>

---

5. Some of those workers participated in nearly equivalent 403(b) plans that predate 401(k) plans and are open principally to teachers and employees of nonprofit organizations.

6. James M. Poterba, Steven F. Venti, and David A. Wise, "How Retirement Saving Programs Increase Saving," *Journal of Economic Perspectives*, vol. 10, no. 4 (Fall 1996), pp. 91-112.

7. Eric M. Engen, William G. Gale, and John Karl Scholz, "The Illusory Effects of Saving Incentives on Saving," *Journal of Economic Perspectives*, vol. 10, no. 4 (Fall 1996), pp. 113-138.